



Datasheets

Danfoss scroll compressors **H series**



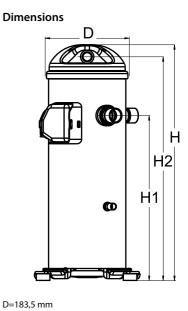
Pantoss

Datasheet, technical data

Danfoss scroll compressor, HLP072T4

General Characteristics

Model number (on compressor nameplate)		HLP072T4LC6	_			
Code number for Singlepack*		120U1756				
Code number for Industrial pack**		120U1753				
Drawing number		0XR6089B-1				
Suction and discharge connections		Brazed				
Suction connection		7/8 " ODF				
Discharge connection		1/2 " ODF				
Oil sight glass		None				
Oil equalisation connection		None				
Oil drain connection		None				
LP gauge port		None				
IPR valve		Yes				
Swept volume	98,65 c	:m3/rev				
Displacement @ Nominal speed	17.2 m3/h @ 2900 rpm	- 20.7 m3/h @ 3500 rpm				
Net weight	37,2	2 kg				
Oil charge	1,57 litre	e, PVE				
Maximum system test pressure Low Side / High side	- bar(g)	/ - bar(g)				
Maximum differential test pressure	- k	bar				
Maximum number of starts per hour		-				
Refrigerant charge limit	5,44	5,44 kg				
Approved refrigerants	R40	07C				



Electrical Characteristics

Nominal voltage	380-415V/3/50Hz - 460V/3/60Hz	D=183,5 mm
Voltage range	342-457 V @ 50Hz - 414-506 V @ 60Hz	H=455 mm H1=280 mm
Winding resistance between phases 1-2 +/- 7% at 25°C	1.852 Ω	
Winding resistance between phases 1-3 +/- 7% at 25°C	1.827 Ω	H2=422 mm
Winding resistance between phases 2-3 +/- 7% at 25°C	1.867 Ω	H3=- mm
Rated Load Amps (RLA)	9.6 A	
Maximum Continuous Current (MCC)	15 A	
Locked Rotor Amps (LRA)	87 A	Terminal b
Motor protection	Internal overload protector	Terminark

Recommended Installation torgues

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

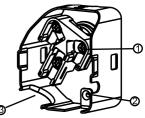
Parts shipped with compressor

Mounting kit with grommets and sleeves Initial oil charge Installation instructions

Approvals : CE certified, UL certified (file SA11565), -*Singlepack: Compressor in cardboard box

**Industrial pack: 12 or 16 Unboxed compressors on pallet

erminal box



IP22 1:

Screw connectors 10-32 UNF x 9.5

2: Earth connection 3:

Power cable passage



Datasheet, accessories and spare parts

Danfoss scroll compressor, HLP072T4

Rotolock accessories, suction side	Code no.	
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 1-1/4"	8156131	
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007	
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007	Solder sleeve adapter set
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031	
Gasket, 1"	8156130	
· · · · · · · · · · · · · · · · · · ·		
Rotolock accessories, sets	Code no.	
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127	1 2 3 4
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
Oil / lubricants	Code no.	1: Rotolock adapter (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	2: Gasket (Suc & Dis)
		3: Solder sleeve (Suc & Dis)
Crankcase heaters	Code no.	4: Rotolock nut (Suc & Dis)
Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057	
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058	
Miscellaneous accessories	Code no.	
Acoustic hood	120Z5044	
Discharge thermostat kit	7750009	
Spare parts	Code no.	
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005	
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031	

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received

Danfoss scroll compressor. HLP072T4

Danfoss

50 U- EN 42000 -..... -1 - 41

Performance	data at 5	0 Hz, EN 129	00 rating co	nditions					R407C
Cond. temp. in				Evapor	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity i	1A/								
30	IN VV	5 653	7 224	9 110	11 361	14 025	17 149	20 781	24 971
30	-	5 053	6 648	8 420	10 536	14 025	17 149	19 426	23 397
40	-	4 745	6 111	7 752	9 718	12 054	15 991	19 420	23 397
40	-		5 622	7 118	8 918	12 054	14 809	16 608	21 768
50	-	-	5 022	6 528	8 147	10 095	12 420	15 169	18 390
55	-	-	-	-	7 416	9 148	12 420	13 725	16 664
60	-		-	-	-	8 235	10 071	12 286	14 929
65	_		-		-	-	8 935	10 862	13 193
		1 -	-		_		0 900	10 002	13 133
Power input in W 30	_	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 175	4 566	4 649
50	-			5 330	5 165	5 035	4 955	4 937	4 994
55	_			-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	_	-	-	6 577	6 385	6 308
Current consump		1	1			1	1		
30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68
Mass flow in kg/h									
30	-	129	162	200	244	295	354	422	501
35	-	124	156	193	236	286	345	412	490
40	-	120	151	186	228	277	334	401	478
45	-	-	145	179	219	266	322	387	463
50	-	-	-	172	210	255	309	372	446
55	-	-	-	-	200	243	295	356	427
		1	1	1	1	1	1	1	1

Coefficient of performance (C.O.P.)

60

65

30	-	1.89	2.30	2.80	3.40	4.11	4.93	5.84	6.83
35	-	1.45	1.82	2.27	2.81	3.45	4.18	4.99	5.85
40	-	1.13	1.45	1.85	2.33	2.90	3.55	4.27	5.04
45	-	-	1.16	1.51	1.92	2.42	2.99	3.64	4.32
50	-	-	-	1.22	1.58	2.00	2.51	3.07	3.68
55	-	-	-	-	1.29	1.65	2.07	2.56	3.10
60	-	-	-	-	-	1.34	1.69	2.11	2.57
65	-	-	-	-	-	-	1.36	1.70	2.09

Nominal performance at to = 5 °C, tc = 50 °C						
Cooling capacity	15 169	W				
Power input	4 937	W				
Current consumption	8.25	А				
Mass flow	372	kg/h				
COP	3 07					

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power data Sound power level	71	dB(A)

280

264

231

All performance data +/- 5%

338

320

408

386

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

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FRCC.ED.HLP072T4.A7.02 / page performance R407C 50 Hz

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	6 071	7 748	9 760	12 158	14 992	18 312	22 169	26 613
35	-	5 582	7 165	9 063	11 327	14 006	17 151	20 813	25 041
40	-	5 151	6 623	8 390	10 502	13 010	15 964	19 413	23 410
45	-	-	6 133	7 753	9 697	12 017	14 763	17 984	21 731
50	-	-	-	7 164	8 924	11 040	13 560	16 536	20 018
55	-	-	-	-	8 195	10 090	12 369	15 083	18 283
60	-	-	-	-	-	9 180	11 201	13 637	16 539
65	-	-	-	-	-	-	10 069	12 211	14 797

Power input in W

30	-	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308

Current consumption in A

30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68

Mass flow in kg/h

30	-	128	161	199	242	293	352	420	498
35	-	124	155	192	235	285	343	410	487
40	-	119	150	185	227	275	332	398	475
45	-	-	144	178	218	265	320	385	460
50	-	-	-	171	209	254	307	370	443
55	-	-	-	-	199	242	293	354	425
60	-	-	-	-	-	230	278	336	405
65	-	-	-	-	-	-	263	318	384

Coefficient of performance (C.O.P.)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

30	-	2.03	2.46	2.99	3.63	4.39	5.26	6.23	7.28
35	-	1.56	1.96	2.44	3.02	3.70	4.48	5.35	6.27
40	-	1.22	1.57	2.00	2.52	3.13	3.82	4.60	5.42
45	-	-	1.27	1.64	2.09	2.63	3.25	3.94	4.67
50	-	-	-	1.34	1.73	2.19	2.74	3.35	4.01
55	-	-	-	-	1.42	1.81	2.28	2.82	3.40
60	-	-	-	-	-	1.49	1.88	2.34	2.85
65	-	-	-	-	-	-	1.53	1.91	2.35

Nominal performance at to =	Nominal performance at to = 7.2 °C, tc = 54.4 °C								
Cooling capacity	16 618	W							
Power input	5 300	W							
Current consumption	8.95	A							
Mass flow	386	kg/h							
COR	3 1/								

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

50 U- EN 42000 -..... -1 - 41

Performance	data at 5	0 Hz, EN 129	00 rating co	nditions					R407C
Cond. temp. in				Evapor	ating temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
Cooling capacity i	1A/								
30	IN VV	5 653	7 224	9 110	11 361	14 025	17 149	20 781	24 971
30	-	5 053	6 648	8 420	10 536	14 025	17 149	19 426	23 397
40	-	4 745	6 111	7 752	9 718	12 054	14 809	19 420	23 397
40	-		5 622	7 118	8 918	12 054	14 809	16 608	21 768
50	-	-	5 022	6 528	8 147	10 095	12 420	15 169	18 390
55	-	-	-	-	7 416	9 148	12 420	13 725	16 664
60	-		-	-	-	8 235	10 071	12 286	14 929
65	_		-		-	-	8 935	10 862	13 193
		1 -	-		_		0 900	10 002	13 133
Power input in W 30	_	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 175	4 566	4 649
50	-			5 330	5 165	5 035	4 955	4 937	4 994
55	_			-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	_	-	-	6 577	6 385	6 308
Current consump		1	1			1	1		
30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68
Mass flow in kg/h									
30	-	129	162	200	244	295	354	422	501
35	-	124	156	193	236	286	345	412	490
40	-	120	151	186	228	277	334	401	478
45	-	-	145	179	219	266	322	387	463
50	-	-	-	172	210	255	309	372	446
55	-	-	-	-	200	243	295	356	427
		1	1	1	1	1	1	1	1

Coefficient of performance (C.O.P.)

60

65

30	-	1.89	2.30	2.80	3.40	4.11	4.93	5.84	6.83
35	-	1.45	1.82	2.27	2.81	3.45	4.18	4.99	5.85
40	-	1.13	1.45	1.85	2.33	2.90	3.55	4.27	5.04
45	-	-	1.16	1.51	1.92	2.42	2.99	3.64	4.32
50	-	-	-	1.22	1.58	2.00	2.51	3.07	3.68
55	-	-	-	-	1.29	1.65	2.07	2.56	3.10
60	-	-	-	-	-	1.34	1.69	2.11	2.57
65	-	-	-	-	-	-	1.36	1.70	2.09

Nominal performance at to = 5 °C	Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	15 169	W						
Power input	4 937	W						
Current consumption	8.25	А						
Mass flow	372	kg/h						
COP	3 07							

Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power data Sound power level	71	dB(A)

280

264

231

All performance data +/- 5%

338

320

408

386

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

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FRCC.ED.HLP072T4.A7.02 / page performance R407C 50 Hz

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	6 071	7 748	9 760	12 158	14 992	18 312	22 169	26 613
35	-	5 582	7 165	9 063	11 327	14 006	17 151	20 813	25 041
40	-	5 151	6 623	8 390	10 502	13 010	15 964	19 413	23 410
45	-	-	6 133	7 753	9 697	12 017	14 763	17 984	21 731
50	-	-	-	7 164	8 924	11 040	13 560	16 536	20 018
55	-	-	-	-	8 195	10 090	12 369	15 083	18 283
60	-	-	-	-	-	9 180	11 201	13 637	16 539
65	-	-	-	-	-	-	10 069	12 211	14 797

Power input in W

30	-	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308

Current consumption in A

30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68

Mass flow in kg/h

30	-	128	161	199	242	293	352	420	498
35	-	124	155	192	235	285	343	410	487
40	-	119	150	185	227	275	332	398	475
45	-	-	144	178	218	265	320	385	460
50	-	-	-	171	209	254	307	370	443
55	-	-	-	-	199	242	293	354	425
60	-	-	-	-	-	230	278	336	405
65	-	-	-	-	-	-	263	318	384

Coefficient of performance (C.O.P.)

to: Evaporating temperature at dew point tc: Condensing temperature at dew point

30	-	2.03	2.46	2.99	3.63	4.39	5.26	6.23	7.28
35	-	1.56	1.96	2.44	3.02	3.70	4.48	5.35	6.27
40	-	1.22	1.57	2.00	2.52	3.13	3.82	4.60	5.42
45	-	-	1.27	1.64	2.09	2.63	3.25	3.94	4.67
50	-	-	-	1.34	1.73	2.19	2.74	3.35	4.01
55	-	-	-	-	1.42	1.81	2.28	2.82	3.40
60	-	-	-	-	-	1.49	1.88	2.34	2.85
65	-	-	-	-	-	-	1.53	1.91	2.35

Nominal performance at to =	Nominal performance at to = 7.2 °C, tc = 54.4 °C									
Cooling capacity	16 618	W								
Power input	5 300	W								
Current consumption	8.95	A								
Mass flow	386	kg/h								
COR	3 1/									

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)											
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10			
Cooling capacity	in W											
30	-	6 784	8 668	10 933	13 634	16 830	20 578	24 938	29 965			
35	-	6 207	7 978	10 104	12 643	15 652	19 189	23 311	28 077			
40	-	5 694	7 333	9 303	11 661	14 465	17 771	21 637	26 121			
45	-	-	6 746	8 542	10 701	13 281	16 338	19 930	24 114			
50	-	-	-	7 834	9 776	12 114	14 904	18 203	22 067			
55	-	-	-	-	8 899	10 977	13 482	16 470	19 997			
60	-	-	-	-	-	9 882	12 085	14 743	17 915			
65	-	-	-	-	-	-	10 722	13 035	15 832			

20

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	154	193	239	291	353	423	505	599
35	-	149	187	231	283	343	413	494	588
40	-	144	181	224	274	333	402	482	574
45	-	-	174	215	264	321	388	467	558
50	-	-	-	207	253	308	374	450	539
55	-	-	-	-	242	295	358	432	519
60	-	-	-	-	-	280	341	413	497
65	-	-	-	-	-	-	323	392	473

Coefficient of performance (C.O.P.)

30	-	1.91	2.35	2.87	3.47	4.17	4.96	5.82	6.73
35	-	1.47	1.85	2.32	2.87	3.51	4.24	5.05	5.92
40	-	1.15	1.48	1.89	2.38	2.95	3.61	4.35	5.16
45	-	-	1.20	1.54	1.96	2.46	3.05	3.71	4.45
50	-	-	-	1.27	1.62	2.04	2.55	3.13	3.78
55	-	-	-	-	1.33	1.68	2.11	2.61	3.17
60	-	-	-	-	-	1.37	1.72	2.14	2.62
65	-	-	-	-	-	-	1.39	1.73	2.13

Nominal performance at to = 5 °C, tc = 50 °C								
Cooling capacity	18 203	W						
Power input	5 817	W						
Current consumption	8.18	A						
Mass flow	450	kg/h						
C.O.P.	3.13							

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	7 285	9 297	11 712	14 589	17 990	21 975	26 603	31 936
35	-	6 699	8 598	10 876	13 592	16 807	20 581	24 975	30 049
40	-	6 181	7 947	10 068	12 603	15 612	19 157	23 296	28 091
45	-	-	7 360	9 303	11 637	14 421	17 715	21 581	26 077
50	-	-	-	8 597	10 709	13 248	16 272	19 844	24 022
55	-	-	-	-	9 835	12 108	14 843	18 100	21 940
60	-	-	-	-	-	11 016	13 441	16 365	19 847
65	-	-	-	-	-	-	12 083	14 653	17 756

Power input in W

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	153	192	237	290	351	421	502	596
35	-	148	186	230	282	341	411	492	584
40	-	143	180	223	272	331	399	479	570
45	-	-	173	214	263	319	386	464	554
50	-	-	-	206	252	307	372	448	536
55	-	-	-	-	241	293	356	430	516
60	-	-	-	-	-	279	339	410	494
65	-	-	-	-	-	-	321	389	470

Coefficient of performance (C.O.P.)

30	-	2.05	2.52	3.07	3.72	4.46	5.30	6.21	7.18
35	-	1.58	2.00	2.50	3.09	3.77	4.55	5.41	6.34
40	-	1.25	1.61	2.04	2.57	3.18	3.89	4.69	5.55
45	-	-	1.31	1.68	2.13	2.67	3.30	4.02	4.81
50	-	-	-	1.39	1.77	2.23	2.78	3.41	4.12
55	-	-	-	-	1.47	1.85	2.32	2.86	3.48
60	-	-	-	-	-	1.53	1.92	2.38	2.90
65	-	-	-	-	-	-	1.57	1.94	2.39

Nominal performance at to = 7.2 °C,	tc = 54.4 °C		
Cooling capacity	19 941	W	
Power input	6 242	W	
Current consumption	8.79	A	
Mass flow	468	kg/h	
COP	3 10		

Pressure switch settings			
Maximum HP switch setting	30	bar(g)	
Minimum LP switch setting	0.5	bar(g)	
LP pump down setting	1	bar(g)	
Sound power data			
Sound power level		dB(A)	
With accoustic hood		dB(A)	

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	in W										
30	-	6 784	8 668	10 933	13 634	16 830	20 578	24 938	29 965		
35	-	6 207	7 978	10 104	12 643	15 652	19 189	23 311	28 077		
40	-	5 694	7 333	9 303	11 661	14 465	17 771	21 637	26 121		
45	-	-	6 746	8 542	10 701	13 281	16 338	19 930	24 114		
50	-	-	-	7 834	9 776	12 114	14 904	18 203	22 067		
55	-	-	-	-	8 899	10 977	13 482	16 470	19 997		
60	-	-	-	-	-	9 882	12 085	14 743	17 915		
65	-	-	-	-	-	-	10 722	13 035	15 832		

20

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	154	193	239	291	353	423	505	599
35	-	149	187	231	283	343	413	494	588
40	-	144	181	224	274	333	402	482	574
45	-	-	174	215	264	321	388	467	558
50	-	-	-	207	253	308	374	450	539
55	-	-	-	-	242	295	358	432	519
60	-	-	-	-	-	280	341	413	497
65	-	-	-	-	-	-	323	392	473

Coefficient of performance (C.O.P.)

30	-	1.91	2.35	2.87	3.47	4.17	4.96	5.82	6.73
35	-	1.47	1.85	2.32	2.87	3.51	4.24	5.05	5.92
40	-	1.15	1.48	1.89	2.38	2.95	3.61	4.35	5.16
45	-	-	1.20	1.54	1.96	2.46	3.05	3.71	4.45
50	-	-	-	1.27	1.62	2.04	2.55	3.13	3.78
55	-	-	-	-	1.33	1.68	2.11	2.61	3.17
60	-	-	-	-	-	1.37	1.72	2.14	2.62
65	-	-	-	-	-	-	1.39	1.73	2.13

Nominal performance at to = 5 °C, tc = 50 °C				
Cooling capacity	18 203	W		
Power input	5 817	W		
Current consumption	8.18	A		
Mass flow	450	kg/h		
C.O.P.	3.13			

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	7 285	9 297	11 712	14 589	17 990	21 975	26 603	31 936
35	-	6 699	8 598	10 876	13 592	16 807	20 581	24 975	30 049
40	-	6 181	7 947	10 068	12 603	15 612	19 157	23 296	28 091
45	-	-	7 360	9 303	11 637	14 421	17 715	21 581	26 077
50	-	-	-	8 597	10 709	13 248	16 272	19 844	24 022
55	-	-	-	-	9 835	12 108	14 843	18 100	21 940
60	-	-	-	-	-	11 016	13 441	16 365	19 847
65	-	-	-	-	-	-	12 083	14 653	17 756

Power input in W

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	153	192	237	290	351	421	502	596
35	-	148	186	230	282	341	411	492	584
40	-	143	180	223	272	331	399	479	570
45	-	-	173	214	263	319	386	464	554
50	-	-	-	206	252	307	372	448	536
55	-	-	-	-	241	293	356	430	516
60	-	-	-	-	-	279	339	410	494
65	-	-	-	-	-	-	321	389	470

Coefficient of performance (C.O.P.)

30	-	2.05	2.52	3.07	3.72	4.46	5.30	6.21	7.18
35	-	1.58	2.00	2.50	3.09	3.77	4.55	5.41	6.34
40	-	1.25	1.61	2.04	2.57	3.18	3.89	4.69	5.55
45	-	-	1.31	1.68	2.13	2.67	3.30	4.02	4.81
50	-	-	-	1.39	1.77	2.23	2.78	3.41	4.12
55	-	-	-	-	1.47	1.85	2.32	2.86	3.48
60	-	-	-	-	-	1.53	1.92	2.38	2.90
65	-	-	-	-	-	-	1.57	1.94	2.39

Nominal performance at to = 7.2 °C, tc = 54.4 °C				
Cooling capacity	19 941	W		
Power input	6 242	W		
Current consumption	8.79	A		
Mass flow	468	kg/h		
COP	3 10			

Pressure switch settings			
Maximum HP switch setting	30	bar(g)	
Minimum LP switch setting	0.5	bar(g)	
LP pump down setting	1	bar(g)	
Sound power data			
Sound power level		dB(A)	
With accoustic hood		dB(A)	

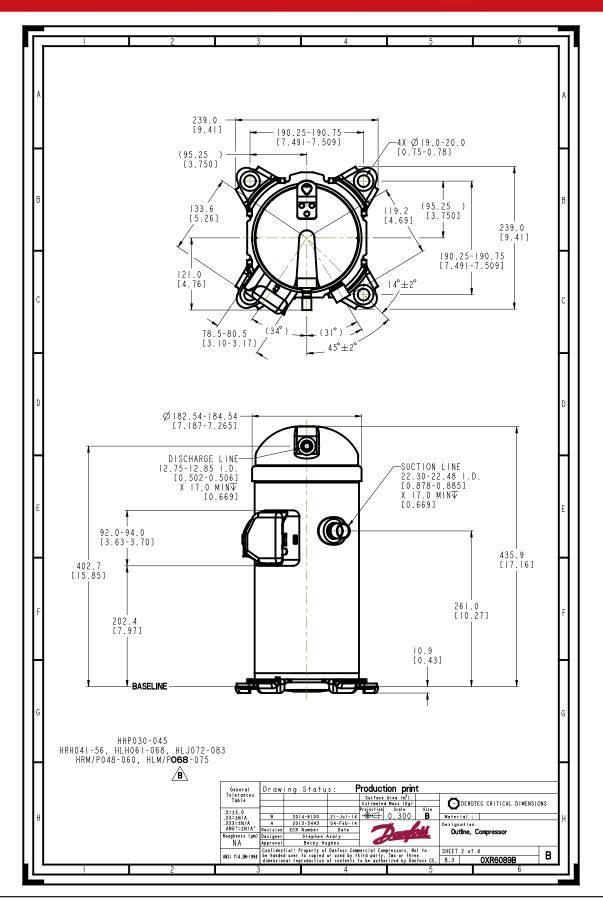
to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

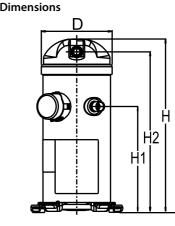
ENGINEERING TOMORROW



Datasheet, technical data

General Characteristics

Model number (on compressor nameplate)		HLP072T4LC8			
Code number for Singlepack*		120U2072			
Code number for Industrial pack**		120U2069			
Drawing number		0XR6049B-2			
Suction and discharge connections		Brazed			
Suction connection		7/8 " ODF			
Discharge connection		1/2 " ODF			
Oil sight glass		None			
Oil equalisation connection		1/2"			
Oil drain connection		None			
LP gauge port		None			
IPR valve		Yes			
Swept volume	98,65 c	m3/rev			
Displacement @ Nominal speed	17.2 m3/h @ 2900 rpm -	· 20.7 m3/h @ 3500 rpm			
Net weight	37,2	2 kg			
Oil charge	1,57 litre, PVE				
Maximum system test pressure Low Side / High side	- bar(g) /	′ - bar(g)			
Maximum differential test pressure	- bar				
Maximum number of starts per hour					
Refrigerant charge limit	5,44	1 kg			
Approved refrigerants	R40)7C			



Danfoss scroll compressor, HLP072T4



H3=- mm

380-415V/3/50Hz - 460V/3/60Hz 342-457 V @ 50Hz - 414-506 V @ 60Hz

1.852 Ω

1.827 Ω

1.867 Ω

9.6 A

15 A

87 A

Internal overload protector

Terminal box



Recommended Installation torgues

Winding resistance between phases 1-2 +/- 7% at 25°C

Winding resistance between phases 1-3 +/- 7% at 25°C

Winding resistance between phases 2-3 +/- 7% at 25°C

Electrical Characteristics

Maximum Continuous Current (MCC)

Nominal voltage

Rated Load Amps (RLA)

Locked Rotor Amps (LRA)

Motor protection

Voltage range

Oil sight glass	52,5 Nm
Power connections / Earth connection	3 Nm / 2 Nm

Parts shipped with compressor

Mounting kit with grommets and sleeves	
Initial oil charge	
Installation instructions	

Approvals : CE certified, UL certified (file SA11565), -*Singlepack: Compressor in cardboard box

**Industrial pack: 12 or 16 Unboxed compressors on pallet

IP22 1:

2:

3:

Screw connectors 10-32 UNF x 9.5

Earth connection

Power cable passage





Datasheet, accessories and spare parts

Danfoss scroll compressor, HLP072T4

Rotolock accessories, suction side	Code no.	
Rotolock valve, V05 (1-1/4" Rotolock, 7/8" ODF)	8168030	
Gasket, 1-1/4"	8156131	
Rotolock accessories, discharge side	Code no.	
Solder sleeve, P06 (1" Rotolock, 1/2" ODF)	8153007	
Angle adapter, C06 (1" Rotolock, 1/2" ODF)	8168007	Solder sleeve adapter set
Rotolock valve, V06 (1" Rotolock, 1/2" ODF)	8168031	
Gasket, 1"	8156130	
· · · · · · · · · · · · · · · · · · ·		
Rotolock accessories, sets	Code no.	
Solder sleeve adapter set (1-1/4" Rotolock, 7/8" ODF), (1" Rotolock, 1/2" ODF)	120Z0127	1 2 3 4
Gasket set, 1", 1-1/4", 1-3/4", OSG gaskets black & white	8156009	
Oil / lubricants	Code no.	1: Rotolock adapter (Suc & Dis)
PVE lubricant, 320HV (FVC68D), 1 litre can	120Z5034	2: Gasket (Suc & Dis)
		3: Solder sleeve (Suc & Dis)
Crankcase heaters	Code no.	4: Rotolock nut (Suc & Dis)
Belt type crankcase heater, 50 W, 230 V, CE mark, UL	120Z0057	
Belt type crankcase heater, 50 W, 400 V, CE mark, UL	120Z0058	
Miscellaneous accessories	Code no.	
Acoustic hood	120Z5044	
Discharge thermostat kit	7750009	
Spare parts	Code no.	
Mounting kit for 1 scroll compressor including 4 grommets, 4 sleeves, 4 bolts, 4 washers	120Z5005	
Mounting kit, including 1 bolt, 1 sleeve, 1 washer	120Z5031	

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reserved

Danfoss scroll compressor. HLP072T4

Danfoss

erformance	data at 5	0 Hz, EN 129	00 rating co	nditions					R407
ond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
	14/								
ooling capacity i 30	-	5 653	7 224	9 110	11 361	14 025	17 149	20 781	24 971
35	-	5 173	6 648	8 420	10 536	13 044	15 991	19 426	23 397
40		4 745	6 111	7 752	9 718	12 054	14 809	18 031	21 768
45	-	-	5 622	7 118	8 918	11 067	13 615	16 608	20 095
50		-	-	6 528	8 147	10 095	12 420	15 169	18 390
55	-	-	_	-	7 416	9 148	11 235	13 725	16 664
60	-	-	_	_	-	8 235	10 071	12 286	14 929
65		_	_	_	_	-	8 935	10 862	13 193
							0.000	10 002	10100
wer input in W 30		2 986	3 144	3 260	2 245	3 415	3 481	2 557	3 656
35	-	3 572	3 655	3 710	3 345 3 747	3 782	3 826	3 557 3 893	3 000
40						-		4 224	
	-	4 212	4 211	4 194	4 173	4 163	4 175		4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308
urrent consump	tion in A	1	1			1		1	1
30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68
ss flow in kg/h									
30	-	129	162	200	244	295	354	422	501
35	-	124	156	193	236	286	345	412	490
40	-	120	151	186	228	277	334	401	478
45	-	-	145	179	219	266	322	387	463
50	-	-	-	172	210	255	309	372	446
55	-	-	-	-	200	243	295	356	427
60	-	-	-	-	-	231	280	338	408
65	-	_	_	-	_	_	264	320	386

Coefficient of performance (C.O.P.)

30	-	1.89	2.30	2.80	3.40	4.11	4.93	5.84	6.83
35	-	1.45	1.82	2.27	2.81	3.45	4.18	4.99	5.85
40	-	1.13	1.45	1.85	2.33	2.90	3.55	4.27	5.04
45	-	-	1.16	1.51	1.92	2.42	2.99	3.64	4.32
50	-	-	-	1.22	1.58	2.00	2.51	3.07	3.68
55	-	-	-	-	1.29	1.65	2.07	2.56	3.10
60	-	-	-	-	-	1.34	1.69	2.11	2.57
65	-	-	-	-	-	-	1.36	1.70	2.09

Nominal performance at to = 5 °C, tc = 5	50 °C	
Cooling capacity	15 169	W
Power input	4 937	W
Current consumption	8.25	А
Mass flow	372	kg/h
C.O.P.	3.07	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10			

Cooling capacity in W

<u> </u>									
30	-	6 071	7 748	9 760	12 158	14 992	18 312	22 169	26 613
35	-	5 582	7 165	9 063	11 327	14 006	17 151	20 813	25 041
40	-	5 151	6 623	8 390	10 502	13 010	15 964	19 413	23 410
45	-	-	6 133	7 753	9 697	12 017	14 763	17 984	21 731
50	-	-	-	7 164	8 924	11 040	13 560	16 536	20 018
55	-	-	-	-	8 195	10 090	12 369	15 083	18 283
60	-	-	-	-	-	9 180	11 201	13 637	16 539
65	-	-	-	-	-	-	10 069	12 211	14 797

Power input in W

30	-	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308

Current consumption in A

30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68

Mass flow in kg/h

30	-	128	161	199	242	293	352	420	498
35	-	124	155	192	235	285	343	410	487
40	-	119	150	185	227	275	332	398	475
45	-	-	144	178	218	265	320	385	460
50	-	-	-	171	209	254	307	370	443
55	-	-	-	-	199	242	293	354	425
60	-	-	-	-	-	230	278	336	405
65	-	-	-	-	-	-	263	318	384

Coefficient of performance (C.O.P.)

30	-	2.03	2.46	2.99	3.63	4.39	5.26	6.23	7.28
35	-	1.56	1.96	2.44	3.02	3.70	4.48	5.35	6.27
40	-	1.22	1.57	2.00	2.52	3.13	3.82	4.60	5.42
45	-	-	1.27	1.64	2.09	2.63	3.25	3.94	4.67
50	-	-	-	1.34	1.73	2.19	2.74	3.35	4.01
55	-	-	-	-	1.42	1.81	2.28	2.82	3.40
60	-	-	-	-	-	1.49	1.88	2.34	2.85
65	-	-	-	-	-	-	1.53	1.91	2.35

Nominal performance at to =	7.2 °C, tc = 54.4 °C		
Cooling capacity	16 618	W	
Power input	5 300	W	
Current consumption	8.95	A	
Mass flow	386	kg/h	
COR	3 1/		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

erformance	data at 5	0 Hz, EN 129	00 rating co	nditions					R407
ond. temp. in				Evapora	ting temperature	in °C (to)			
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10
	14/								
ooling capacity i 30	-	5 653	7 224	9 110	11 361	14 025	17 149	20 781	24 971
35	-	5 173	6 648	8 420	10 536	13 044	15 991	19 426	23 397
40		4 745	6 111	7 752	9 718	12 054	14 809	18 031	21 768
45	-	-	5 622	7 118	8 918	11 067	13 615	16 608	20 095
50		-	-	6 528	8 147	10 095	12 420	15 169	18 390
55	-	-	_	-	7 416	9 148	11 235	13 725	16 664
60	-	-	_	_	-	8 235	10 071	12 286	14 929
65		_	_	_	_	-	8 935	10 862	13 193
							0.000	10 002	10100
wer input in W 30		2 986	3 144	3 260	2 245	3 415	3 481	2 557	3 656
35	-	3 572	3 655	3 710	3 345 3 747	3 782	3 826	3 557 3 893	3 000
40						-		4 224	
	-	4 212	4 211	4 194	4 173	4 163	4 175		4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308
urrent consump	tion in A	1				1		1	1
30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68
ss flow in kg/h									
30	-	129	162	200	244	295	354	422	501
35	-	124	156	193	236	286	345	412	490
40	-	120	151	186	228	277	334	401	478
45	-	-	145	179	219	266	322	387	463
50	-	-	-	172	210	255	309	372	446
55	-	-	-	-	200	243	295	356	427
60	-	-	-	-	-	231	280	338	408
65	-	_	_	-	_	_	264	320	386

Coefficient of performance (C.O.P.)

30	-	1.89	2.30	2.80	3.40	4.11	4.93	5.84	6.83
35	-	1.45	1.82	2.27	2.81	3.45	4.18	4.99	5.85
40	-	1.13	1.45	1.85	2.33	2.90	3.55	4.27	5.04
45	-	-	1.16	1.51	1.92	2.42	2.99	3.64	4.32
50	-	-	-	1.22	1.58	2.00	2.51	3.07	3.68
55	-	-	-	-	1.29	1.65	2.07	2.56	3.10
60	-	-	-	-	-	1.34	1.69	2.11	2.57
65	-	-	-	-	-	-	1.36	1.70	2.09

Nominal performance at to = 5 °C, tc = 5	50 °C	
Cooling capacity	15 169	W
Power input	4 937	W
Current consumption	8.25	А
Mass flow	372	kg/h
C.O.P.	3.07	

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 50 Hz, ARI rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	

Cooling capacity in W

<u> </u>									
30	-	6 071	7 748	9 760	12 158	14 992	18 312	22 169	26 613
35	-	5 582	7 165	9 063	11 327	14 006	17 151	20 813	25 041
40	-	5 151	6 623	8 390	10 502	13 010	15 964	19 413	23 410
45	-	-	6 133	7 753	9 697	12 017	14 763	17 984	21 731
50	-	-	-	7 164	8 924	11 040	13 560	16 536	20 018
55	-	-	-	-	8 195	10 090	12 369	15 083	18 283
60	-	-	-	-	-	9 180	11 201	13 637	16 539
65	-	-	-	-	-	-	10 069	12 211	14 797

Power input in W

30	-	2 986	3 144	3 260	3 345	3 415	3 481	3 557	3 656
35	-	3 572	3 655	3 710	3 747	3 782	3 826	3 893	3 996
40	-	4 212	4 211	4 194	4 173	4 163	4 175	4 224	4 322
45	-	-	4 826	4 728	4 640	4 575	4 546	4 566	4 649
50	-	-	-	5 330	5 165	5 035	4 955	4 937	4 994
55	-	-	-	-	5 764	5 560	5 418	5 352	5 374
60	-	-	-	-	-	6 166	5 953	5 829	5 807
65	-	-	-	-	-	-	6 577	6 385	6 308

Current consumption in A

30	-	6.50	6.52	6.54	6.56	6.58	6.59	6.61	6.63
35	-	6.84	6.87	6.89	6.90	6.92	6.93	6.95	6.97
40	-	7.18	7.21	7.22	7.24	7.25	7.27	7.29	7.31
45	-	-	7.62	7.63	7.65	7.66	7.68	7.69	7.71
50	-	-	-	8.20	8.21	8.22	8.24	8.25	8.28
55	-	-	-	-	9.01	9.02	9.03	9.05	9.07
60	-	-	-	-	-	10.13	10.14	10.16	10.18
65	-	-	-	-	-	-	11.64	11.66	11.68

Mass flow in kg/h

30	-	128	161	199	242	293	352	420	498
35	-	124	155	192	235	285	343	410	487
40	-	119	150	185	227	275	332	398	475
45	-	-	144	178	218	265	320	385	460
50	-	-	-	171	209	254	307	370	443
55	-	-	-	-	199	242	293	354	425
60	-	-	-	-	-	230	278	336	405
65	-	-	-	-	-	-	263	318	384

Coefficient of performance (C.O.P.)

30	-	2.03	2.46	2.99	3.63	4.39	5.26	6.23	7.28
35	-	1.56	1.96	2.44	3.02	3.70	4.48	5.35	6.27
40	-	1.22	1.57	2.00	2.52	3.13	3.82	4.60	5.42
45	-	-	1.27	1.64	2.09	2.63	3.25	3.94	4.67
50	-	-	-	1.34	1.73	2.19	2.74	3.35	4.01
55	-	-	-	-	1.42	1.81	2.28	2.82	3.40
60	-	-	-	-	-	1.49	1.88	2.34	2.85
65	-	-	-	-	-	-	1.53	1.91	2.35

Nominal performance at to =	7.2 °C, tc = 54.4 °C		
Cooling capacity	16 618	W	
Power input	5 300	W	
Current consumption	8.95	A	
Mass flow	386	kg/h	
COR	3 1/		

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level	71	dB(A)
With accoustic hood	66	dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)									
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	
Cooling capacity	in W									
30	-	6 784	8 668	10 933	13 634	16 830	20 578	24 938	29 965	
35	-	6 207	7 978	10 104	12 643	15 652	19 189	23 311	28 077	
40	-	5 694	7 333	9 303	11 661	14 465	17 771	21 637	26 121	
45	-	-	6 746	8 542	10 701	13 281	16 338	19 930	24 114	
50	-	-	-	7 834	9 776	12 114	14 904	18 203	22 067	
55	-	-	-	-	8 899	10 977	13 482	16 470	19 997	
60	-	-	-	-	-	9 882	12 085	14 743	17 915	
65	-	-	-	-	-	-	10 722	13 035	15 832	

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	154	193	239	291	353	423	505	599
35	-	149	187	231	283	343	413	494	588
40	-	144	181	224	274	333	402	482	574
45	-	-	174	215	264	321	388	467	558
50	-	-	-	207	253	308	374	450	539
55	-	-	-	-	242	295	358	432	519
60	-	-	-	-	-	280	341	413	497
65	-	-	-	-	-	-	323	392	473

Coefficient of performance (C.O.P.)

30	-	1.91	2.35	2.87	3.47	4.17	4.96	5.82	6.73
35	-	1.47	1.85	2.32	2.87	3.51	4.24	5.05	5.92
40	-	1.15	1.48	1.89	2.38	2.95	3.61	4.35	5.16
45	-	-	1.20	1.54	1.96	2.46	3.05	3.71	4.45
50	-	-	-	1.27	1.62	2.04	2.55	3.13	3.78
55	-	-	-	-	1.33	1.68	2.11	2.61	3.17
60	-	-	-	-	-	1.37	1.72	2.14	2.62
65	-	-	-	-	-	-	1.39	1.73	2.13

Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	18 203	W					
Power input	5 817	W					
Current consumption	8.18	A					
Mass flow	450	kg/h					
C.O.P.	3.13						

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

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Danfoss scroll compressor. HLP072T4

Danfoss

R407C

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)								
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10	

Cooling capacity in W

30	-	7 285	9 297	11 712	14 589	17 990	21 975	26 603	31 936
35	-	6 699	8 598	10 876	13 592	16 807	20 581	24 975	30 049
40	-	6 181	7 947	10 068	12 603	15 612	19 157	23 296	28 091
45	-	-	7 360	9 303	11 637	14 421	17 715	21 581	26 077
50	-	-	-	8 597	10 709	13 248	16 272	19 844	24 022
55	-	-	-	-	9 835	12 108	14 843	18 100	21 940
60	-	-	-	-	-	11 016	13 441	16 365	19 847
65	-	-	-	-	-	-	12 083	14 653	17 756

Power input in W

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	153	192	237	290	351	421	502	596
35	-	148	186	230	282	341	411	492	584
40	-	143	180	223	272	331	399	479	570
45	-	-	173	214	263	319	386	464	554
50	-	-	-	206	252	307	372	448	536
55	-	-	-	-	241	293	356	430	516
60	-	-	-	-	-	279	339	410	494
65	-	-	-	-	-	-	321	389	470

Coefficient of performance (C.O.P.)

30	-	2.05	2.52	3.07	3.72	4.46	5.30	6.21	7.18
35	-	1.58	2.00	2.50	3.09	3.77	4.55	5.41	6.34
40	-	1.25	1.61	2.04	2.57	3.18	3.89	4.69	5.55
45	-	-	1.31	1.68	2.13	2.67	3.30	4.02	4.81
50	-	-	-	1.39	1.77	2.23	2.78	3.41	4.12
55	-	-	-	-	1.47	1.85	2.32	2.86	3.48
60	-	-	-	-	-	1.53	1.92	2.38	2.90
65	-	-	-	-	-	-	1.57	1.94	2.39

Nominal performance at to = 7.2 °C, tc = 54.4 °C									
Cooling capacity	19 941	W							
Power input	6 242	W							
Current consumption	8.79	Α							
Mass flow	468	kg/h							
COR	3 10								

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%

Danfoss scroll compressor. HLP072T4

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R407C

Performance data at 60 Hz, EN 12900 rating conditions

Cond. temp. in	Evaporating temperature in °C (to)										
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10		
Cooling capacity	in W										
30	-	6 784	8 668	10 933	13 634	16 830	20 578	24 938	29 965		
35	-	6 207	7 978	10 104	12 643	15 652	19 189	23 311	28 077		
40	-	5 694	7 333	9 303	11 661	14 465	17 771	21 637	26 121		
45	-	-	6 746	8 542	10 701	13 281	16 338	19 930	24 114		
50	-	-	-	7 834	9 776	12 114	14 904	18 203	22 067		
55	-	-	-	-	8 899	10 977	13 482	16 470	19 997		
60	-	-	-	-	-	9 882	12 085	14 743	17 915		
65	-	-	-	-	-	-	10 722	13 035	15 832		

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	154	193	239	291	353	423	505	599
35	-	149	187	231	283	343	413	494	588
40	-	144	181	224	274	333	402	482	574
45	-	-	174	215	264	321	388	467	558
50	-	-	-	207	253	308	374	450	539
55	-	-	-	-	242	295	358	432	519
60	-	-	-	-	-	280	341	413	497
65	-	-	-	-	-	-	323	392	473

Coefficient of performance (C.O.P.)

30	-	1.91	2.35	2.87	3.47	4.17	4.96	5.82	6.73
35	-	1.47	1.85	2.32	2.87	3.51	4.24	5.05	5.92
40	-	1.15	1.48	1.89	2.38	2.95	3.61	4.35	5.16
45	-	-	1.20	1.54	1.96	2.46	3.05	3.71	4.45
50	-	-	-	1.27	1.62	2.04	2.55	3.13	3.78
55	-	-	-	-	1.33	1.68	2.11	2.61	3.17
60	-	-	-	-	-	1.37	1.72	2.14	2.62
65	-	-	-	-	-	-	1.39	1.73	2.13

Nominal performance at to = 5 °C, tc = 50 °C							
Cooling capacity	18 203	W					
Power input	5 817	W					
Current consumption	8.18	A					
Mass flow	450	kg/h					
C.O.P.	3.13						

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point

Rating conditions : Superheat = 10 K , Subcooling = 0 K

All performance data +/- 5%

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Danfoss scroll compressor. HLP072T4

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R407C

Performance data at 60 Hz, ARI rating conditions

Cond. temp. in		Evaporating temperature in °C (to)							
°C (tc)	-30	-25	-20	-15	-10	-5	0	5	10

Cooling capacity in W

30	-	7 285	9 297	11 712	14 589	17 990	21 975	26 603	31 936
35	-	6 699	8 598	10 876	13 592	16 807	20 581	24 975	30 049
40	-	6 181	7 947	10 068	12 603	15 612	19 157	23 296	28 091
45	-	-	7 360	9 303	11 637	14 421	17 715	21 581	26 077
50	-	-	-	8 597	10 709	13 248	16 272	19 844	24 022
55	-	-	-	-	9 835	12 108	14 843	18 100	21 940
60	-	-	-	-	-	11 016	13 441	16 365	19 847
65	-	-	-	-	-	-	12 083	14 653	17 756

Power input in W

30	-	3 551	3 694	3 814	3 923	4 031	4 148	4 284	4 450
35	-	4 234	4 302	4 355	4 402	4 454	4 521	4 613	4 742
40	-	4 945	4 939	4 924	4 909	4 905	4 923	4 972	5 063
45	-	-	5 614	5 531	5 455	5 396	5 364	5 371	5 425
50	-	-	-	6 185	6 048	5 934	5 854	5 817	5 835
55	-	-	-	-	6 697	6 529	6 400	6 320	6 302
60	-	-	-	-	-	7 188	7 011	6 890	6 835
65	-	-	-	-	-	-	7 697	7 534	7 444

Current consumption in A

30	-	5.23	5.15	5.25	5.46	5.72	5.94	6.08	6.05
35	-	6.60	6.38	6.36	6.46	6.62	6.76	6.83	6.75
40	-	7.55	7.22	7.10	7.12	7.21	7.30	7.32	7.21
45	-	-	7.84	7.65	7.61	7.65	7.71	7.71	7.60
50	-	-	-	8.17	8.09	8.12	8.17	8.18	8.09
55	-	-	-	-	8.75	8.78	8.85	8.90	8.85
60	-	-	-	-	-	9.81	9.93	10.03	10.06
65	-	-	-	-	-	-	11.56	11.75	11.87

Mass flow in kg/h

30	-	153	192	237	290	351	421	502	596
35	-	148	186	230	282	341	411	492	584
40	-	143	180	223	272	331	399	479	570
45	-	-	173	214	263	319	386	464	554
50	-	-	-	206	252	307	372	448	536
55	-	-	-	-	241	293	356	430	516
60	-	-	-	-	-	279	339	410	494
65	-	-	-	-	-	-	321	389	470

Coefficient of performance (C.O.P.)

30	-	2.05	2.52	3.07	3.72	4.46	5.30	6.21	7.18
35	-	1.58	2.00	2.50	3.09	3.77	4.55	5.41	6.34
40	-	1.25	1.61	2.04	2.57	3.18	3.89	4.69	5.55
45	-	-	1.31	1.68	2.13	2.67	3.30	4.02	4.81
50	-	-	-	1.39	1.77	2.23	2.78	3.41	4.12
55	-	-	-	-	1.47	1.85	2.32	2.86	3.48
60	-	-	-	-	-	1.53	1.92	2.38	2.90
65	-	-	-	-	-	-	1.57	1.94	2.39

Nominal performance at to = 7.2 °C, tc = 54.4 °C							
Cooling capacity	19 941	W					
Power input	6 242	W					
Current consumption	8.79	Α					
Mass flow	468	kg/h					
COR	3 10						

Pressure switch settings		
Maximum HP switch setting	30	bar(g)
Minimum LP switch setting	0.5	bar(g)
LP pump down setting	1	bar(g)
-		
Sound power data		
Sound power level		dB(A)
With accoustic hood		dB(A)

to: Evaporating temperature at dew point

tc: Condensing temperature at dew point Rating conditions : Superheat = 11.1 K , Subcooling = 8.3 K

All performance data +/- 5%



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